

WHAT IS CLAIMED IS:

1. A screwdriver, comprising:
 - (a) an apertured core;
 - (b) a bit storage member rotatable with respect to said core;
 - (c) a plurality of bit storage spaces provided within said bit storage member;
 - (d) a push rod slidably movable through said core;
 - (e) a push rod magnet ^{HAVING A} ~~MEANS~~ on a forward end of said push rod;
 - (f) a hand grip on a rearward end of said push rod;
 - (g) a magnetic bit changing arm ^{MOVABLE TOWARD A} selected one of said bit storage spaces;
 - (h) an apertured shaft extending from a forward end of said core and in coaxial alignment with said push rod;

wherein:

- (i) said push rod is slidably movable through said core and through said bit storage member between extended and retracted positions;
- (ii) when said push rod is in said extended position:
 - (1) said magnet ^{MEANS} is located rearwardly of said bit storage spaces;
 - (2) said core is rotatable with respect to said bit storage member to position said bit changing arm adjacent said selected one of said bit storage spaces;
 - (3) said bit changing arm is extended toward said selected one of said bit storage spaces, magnetically attracting to said bit changing arm a tool bit located in said selected one of said bit storage spaces;
- (iii) during movement of said push rod from said extended position into said retracted position:
 - (1) said core is not rotatable with respect to said bit storage member;

- (2) said push rod pushes said bit changing arm and said magnetically attracted tool bit away from said selected one of said bit storage spaces and into coaxial alignment with said shaft;
 - (3) said push rod ^{AND SAID} magnet ^{MEANS} is pushed forwardly toward a rearward end of said magnetically attracted tool bit, magnetically attracting said tool bit onto said push rod ; and,
 - (4) said push rod is pushed forwardly, pushing said magnetically attracted tool bit forwardly into said shaft until said magnetically attracted tool bit protrudes through an open forward end of said shaft.
2. A screwdriver as defined in claim 1, further comprising a bit changing slot in said core.
3. A screwdriver as defined in claim 2, wherein during movement of said push rod from said retracted position into said extended position said push rod magnet magnetically retains said magnetically attracted tool bit on said forward end of said push rod as said push rod is pulled rearwardly, thereby pulling said magnetically attracted tool bit rearwardly through said shaft to position said magnetically attracted tool bit adjacent said bit changing slot and said selected one of said bit storage spaces.
4. A screwdriver as defined in claim 3, wherein said bit changing arm further comprises a magnetic lever arm pivotally coupled to said core and biased toward said bit changing slot.
5. A screwdriver as defined in claim 4, further comprising a first spring coupled between said lever arm and said core to bias said lever arm toward and through said bit changing slot and wherein said movement of said push rod from said extended position into said retracted position pushes said forward end of said push rod against said lever arm, overcoming said first spring bias.

6. A screwdriver as defined in claim 5, wherein said movement of said push rod from said retracted position into said extended position withdraws said push rod from said lever arm, whereupon said first spring biases said lever arm toward and through said bit changing slot, sweeping said tool bit into said selected one of said bit storage spaces.
7. A screwdriver as defined in claim 6, wherein:
 - (a) each of said bit storage spaces further comprises a bit storage cavity in a forward end of said bit storage member; and,
 - (b) said core has a forward face forming a tool bit base support for said bit storage cavities.
8. A screwdriver as defined in claim 1, wherein:
 - (a) said hand grip further comprises an outer sleeve; and,
 - (b) said bit storage member further comprises an inner sleeve telescopically slidable within said outer sleeve.
9. A screwdriver as defined in claim 8, further comprising a core retainer to rotatably retain said core in said inner sleeve.
10. A screwdriver as defined in claim 9, further comprising:
 - (a) a forwardly tapered region on a central forward portion of said push rod;
 - (b) a stop member; and,
 - (c) a second spring coupled between an inner surface of said inner sleeve and said stop member to bias said stop member toward said push rod.
11. A screwdriver as defined in claim 10, wherein said movement of said push rod from said retracted position into said extended position positions said tapered region adjacent said stop member, whereupon said second spring biases said stop member into said tapered region, thereby preventing further rearward movement of said push rod.

12. A screwdriver as defined in claim 11, wherein during said movement of said push rod from said extended position into said retracted position, said tapered region contacts said stop member, overcomes said second spring bias and moves said stop member away from said push rod, thereby allowing forward movement of said push rod.
13. A screwdriver as defined in claim 12, further comprising a retainer positioned between said second spring and said inner surface of said inner sleeve, and wherein during rotation of said core with respect to said bit storage member, said second spring biases said retainer into one of a plurality of grooves formed in said inner surface of said inner sleeve.
14. A screwdriver as defined in claim 8, further comprising:
 - (a) a first plurality of longitudinally extending ridges and grooves alternately interleaved on an outer surface of said inner sleeve;
 - (b) a second plurality of longitudinally extending ridges and grooves alternately interleaved on an inner surface of said outer sleeve;wherein:
 - (i) said first plurality ridges are sized and shaped for slidable longitudinal movement along said second plurality grooves; and,
 - (ii) said second plurality ridges are sized and shaped for slidable longitudinal movement along said first plurality of grooves.
15. A screwdriver as defined in claim 14, said core having a rearward base portion.
16. A screwdriver as defined in claim 15, further comprising a third plurality of longitudinally extending ridges and grooves alternately interleaved on an outer surface of said base portion, wherein:
 - (i) said third plurality ridges are sized and shaped for slidable longitudinal movement along said second plurality grooves; and,
 - (ii) said second plurality ridges are sized and shaped for slidable longitudinal movement along said third plurality grooves.

17. A screwdriver as defined in claim 8, wherein said shaft is non-rotatably retained on the forward end of said inner sleeve.
18. A screwdriver as defined in claim 8, wherein said shaft is rotatably retained on the forward end of said inner sleeve with a reversable one-way ratchet.
19. A screwdriver as defined in claim 2, wherein:
 - (a) said core further comprises a forwardly projecting stem;
 - (b) said stem and said shaft are hexagonally apertured and are hexagonally aligned whenever said bit changing slot is positioned adjacent one of said bit storage cavities; and,
 - (c) said tool bit has a hexagonal cross section smaller than the hexagonal cross section of either one of said stem or said shaft apertures.
20. A screwdriver as defined in claim 7, wherein:
 - (a) said core further comprises a forwardly projecting stem; and,
 - (b) said core aperture has a cross section smaller than a largest cross section of said tool bit.
21. A screwdriver as defined in claim 16, wherein said first, said second and said third plurality ridges and grooves are mutually aligned such that whenever said outer sleeve is telescopically slidably movable with respect to said inner sleeve said bit changing slot is aligned with one of said bit storage cavities.
22. A screwdriver as defined in claim 1, further comprising a forwardly projecting stem on said core, said stem having a forward rim for self-centering engagement within a rearward base on said shaft.
23. A screwdriver as defined in claim 1, further comprising a rearwardly protruding shank on said rearward end of said hand grip.
24. A screwdriver as defined in claim 23, wherein said push rod rearward end is recessed and fastened within said shank.

25. A screwdriver, comprising:
- (a) an apertured core;
 - (b) a bit storage member rotatable with respect to said core;
 - (c) a plurality of bit storage spaces provided within said bit storage member;
 - (d) a push rod slidably movable through said core;
 - (e) a hand grip on a rearward end of said push rod;
 - (f) a lever arm coupled to said push rod and biased toward a selected one of said bit storage spaces, said lever arm having a lever arm magnet;
 - (g) an apertured shaft extending from a forward end of said core and in coaxial alignment with said push rod;

wherein:

- (i) said push rod is slidably movable through said core and through said bit storage member between extended and retracted positions;
- (ii) when said push rod is in said extended position:
 - (1) said lever arm magnet is located rearwardly of said bit storage spaces;
 - (2) said core is rotatable with respect to said bit storage member to position said bit changing arm adjacent said selected one of said bit storage spaces;
 - (3) said lever arm is extended toward said selected one of said bit storage spaces, magnetically attracting to said lever arm a tool bit located in said selected one of said bit storage spaces;
- (iii) during movement of said push rod from said extended position into said retracted position:
 - (1) said core is not rotatable with respect to said bit storage member;
 - (2) said push rod pushes said lever arm and said magnetically attracted tool bit away from said selected one of said bit storage spaces and into coaxial alignment with said shaft; and,
 - (3) said push rod is pushed forwardly, pushing, said magnetically attracted tool bit forwardly into said

shaft until said magnetically attracted tool bit protrudes through an open forward end of said shaft.

26. A screwdriver as defined in claim 25, further comprising a bit changing slot in said core.
27. A screwdriver as defined in claim 26, wherein during movement of said push rod from said retracted position into said extended position said lever arm magnet magnetically retains said magnetically attracted tool bit as said push rod is pulled rearwardly, thereby pulling said magnetically attracted tool bit rearwardly through said shaft to position said magnetically attracted tool bit adjacent said bit changing slot and said selected one of said bit storage spaces.
28. A screwdriver as defined in claim 27, further comprising a first spring coupled between said lever arm and said push rod to bias said lever arm toward and through said bit changing slot.
29. A screwdriver as defined in claim 28, wherein said movement of said push rod from said extended position into said retracted position pivots said lever arm into axial alignment with said push rod, overcoming said first spring bias.
30. A screwdriver as defined in claim 29, wherein said movement of said push rod from said retracted position into said extended position positions said lever arm rearwardly of said bit storage cavities, whereupon said first spring biases said lever arm toward and through said bit changing slot, magnetically moving said tool bit into said selected one of said bit storage spaces.
31. A screwdriver as defined in claim 30, wherein:
 - (a) each of said bit storage spaces further comprises a bit storage cavity in a forward end of said bit storage member; and,
 - (b) said core has a forward face forming a tool bit base support for said bit storage cavities.

32. A screwdriver as defined in claim 25, wherein:
- (a) said hand grip further comprises an outer sleeve; and,
 - (b) said bit storage member further comprises an inner sleeve telescopically slidable within said outer sleeve;
33. A screwdriver as defined in claim 32, further comprising a core retainer to rotatably retain said core in said inner sleeve.
34. A screwdriver as defined in claim 33, further comprising:
- (a) a cavity in said core; and,
 - (b) a stop member on a rearward end of said lever arm.
35. A screwdriver as defined in claim 34, wherein said movement of said push rod from said retracted position into said extended position positions said stop member adjacent said cavity, whereupon said first spring biases said stop member toward and into said cavity, thereby preventing further rearward movement of said push rod.
36. A screwdriver as defined in claim 35, wherein during said movement of said push rod from said extended position into said retracted position, a forward end of said cavity contacts said stop member, overcomes said first spring bias and moves said stop member toward said push rod, thereby allowing ~~FORWARD~~ movement of said push rod.
37. A screwdriver as defined in claim 36, further comprising:
- (a) a second spring positioned in an exterior recess in said core; and,
 - (b) a retainer positioned between said second spring and said inner surface of said inner sleeve, and wherein during rotation of said core with respect to said inner sleeve, said second spring biases said retainer into one of a plurality of grooves formed in said inner surface of said inner sleeve.

38. A screwdriver as defined in claim 32, further comprising:
- (a) a first plurality of longitudinally extending ridges and grooves alternately interleaved on an outer surface of said inner sleeve;
 - (b) a second plurality of longitudinally extending ridges and grooves alternately interleaved on an inner surface of said outer sleeve;
- wherein:
- (i) said first plurality ridges are sized and shaped for slidable longitudinal movement along said second plurality grooves; and,
 - (ii) said second plurality ridges are sized and shaped for slidable longitudinal movement along said first plurality grooves.
39. A screwdriver as defined in claim 38, said core having a rearward base portion.
40. A screwdriver as defined in claim 39, further comprising a third plurality of longitudinally extending ridges and grooves alternately interleaved on an outer surface of said base portion,
- wherein:
- (i) said third plurality ridges are sized and shaped for slidable longitudinal movement along said second plurality grooves; and,
 - (ii) said second plurality ridges are sized and shaped for slidable longitudinal movement along said third plurality grooves.
41. A screwdriver as defined in claim 32, wherein said shaft is non-rotatably retained on the forward end of said inner sleeve.
42. A screwdriver as defined in claim 32, wherein said shaft is rotatably retained on the forward end of said inner sleeve with a reversable one-way ratchet.
43. A screwdriver as defined in claim 26, wherein:
- (a) said core further comprises a forwardly projecting stem;
 - (b) said stem and said shaft are hexagonally apertured and are hexagonally aligned whenever said bit changing slot is positioned

- adjacent one of said bit storage cavities; and,
 - (c) said tool bit has a hexagonal cross section smaller than the hexagonal cross section of either one of said stem or said shaft apertures.
44. A screwdriver as defined in claim 31, wherein:
- (a) said core further comprises a forwardly projecting stem; and,
 - (b) said core aperture has a cross section smaller than a largest cross section of said tool bit.
45. A screwdriver as defined in claim 40, wherein said first, said second and said third plurality ridges and grooves are mutually aligned such that whenever said outer sleeve is telescopically slidably movable with respect to said inner sleeve said bit changing slot is aligned with one of said bit storage cavities.
46. A screwdriver as defined in claim 25, further comprising a forwardly projecting stem on said core, said stem having a forward rim for self-centering engagement within a rearward base on said shaft.
47. A screwdriver as defined in claim 25, further comprising a rearwardly protruding shank on said rearward end of said hand grip.
48. A screwdriver as defined in claim 47, wherein said push rod rearward end is recessed and fastened within said shank.

49. A screwdriver, comprising:

- (a) an apertured core;
- (b) a bit storage member rotatable with respect to said core;
- (c) a plurality of bit storage spaces provided within said bit storage member;
- (d) a push rod slidably movable through said core;
- (e) a push rod ~~HAVING A MAGNET~~ ^{MEANS} on a forward end of said push rod;
- (f) a hand grip on a rearward end of said push rod;
- (g) a bit changing arm movable toward a selected one of said bit storage spaces;
- (h) an apertured shaft extending from a forward end of said core and in coaxial alignment with said push rod;

wherein:

- (i) said push rod is slidably movable through said core and through said bit storage member between extended and retracted positions;
- (ii) when said push rod is in said extended position:
 - (1) said ~~magnet~~ ^{MEANS} is located rearwardly of said bit storage spaces;
 - (2) said core is rotatable with respect to said bit storage member to position said bit changing arm adjacent said selected one of said bit storage spaces;
 - (3) said bit changing arm is extended toward said selected one of said bit storage spaces, ^{RELEASABLY MOUNTING}
~~TO~~ said bit changing arm a tool bit located in said selected one of said bit storage spaces;
- (iii) during movement of said push rod from said extended position into said retracted position:
 - (1) said core is not rotatable with respect to said bit storage member;
 - (2) said push rod pushes said bit changing arm and said ^{RELEASABLY MOUNTED} tool bit away from said selected one of said bit storage spaces and into coaxial alignment with said shaft;
 - (3) said push rod ^{VAND SAID} magnet ^{MEANS} is pushed forwardly toward a

rearward end of said ^{RELEASABLY MOUNTED} tool bit, magnetically attracting said tool bit onto said push rod ;
and,

- (4) said push rod is pushed forwardly, pushing said magnetically attracted tool bit forwardly into said shaft until said magnetically attracted tool bit protrudes through an open forward end of said shaft.

50. A screwdriver as defined in claim 49, further comprising a bit changing slot in said core.
51. A screwdriver as defined in claim 50, wherein during movement of said push rod from said retracted position into said extended position said push rod : magnetically retains said magnetically attracted tool bit on said forward end of said push rod as said push rod is pulled rearwardly, thereby pulling said magnetically attracted tool bit rearwardly through said shaft to position said magnetically attracted tool bit adjacent said bit changing slot and said selected one of said bit storage spaces.
52. A screwdriver as defined in claim 51, wherein said bit changing arm further comprises a lever arm pivotally coupled to said core and biased toward said bit changing slot.
53. A screwdriver as defined in claim 52, further comprising a first spring coupled between said lever arm and said core to bias said lever arm toward and through said bit changing slot and wherein said movement of said push rod from said extended position into said retracted position pushes said forward end of said push rod against said lever arm, overcoming said first spring bias.
54. A screwdriver as defined in claim 53, wherein said movement of said push rod from said retracted position into said extended position withdraws said push rod from said lever arm, whereupon said first spring biases said lever

arm toward and through said bit changing slot, sweeping said tool bit into said selected one of said bit storage spaces.

55. A screwdriver as defined in claim 54, wherein:
- (a) each of said bit storage spaces further comprises a bit storage cavity in a forward end of said bit storage member; and,
 - (b) said core has a forward face forming a tool bit base support for said bit storage cavities.
56. A screwdriver as defined in claim 49, wherein:
- (a) said hand grip further comprises an outer sleeve; and,
 - (b) said bit storage member further comprises an inner sleeve telescopically slidable within said outer sleeve.
57. A screwdriver as defined in claim 56, further comprising a core retainer to rotatably retain said core in said inner sleeve.
58. A screwdriver as defined in claim 57, further comprising:
- (a) a forwardly tapered region on a central forward portion of said push rod;
 - (b) a stop member; and,
 - (c) a second spring coupled between an inner surface of said inner sleeve and said stop member to bias said stop member toward said push rod.
59. A screwdriver as defined in claim 58, wherein said movement of said push rod from said retracted position into said extended position positions said tapered region adjacent said stop member, whereupon said second spring biases said stop member into said tapered region, thereby preventing further rearward movement of said push rod.
60. A screwdriver as defined in claim 59, wherein during said movement of said push rod from said extended position into said retracted position, said tapered region contacts said stop member, overcomes said second spring

bias and moves said stop member away from said push rod, thereby allowing forward movement of said push rod.

61. A screwdriver as defined in claim 60, further comprising a retainer positioned between said second spring and said inner surface of said inner sleeve, and wherein during rotation of said core with respect to said bit storage member, said second spring biases said retainer into one of a plurality of grooves formed in said inner surface of said inner sleeve.
62. A screwdriver as defined in claim 56, further comprising:
 - (a) a first plurality of longitudinally extending ridges and grooves alternately interleaved on an outer surface of said inner sleeve;
 - (b) a second plurality of longitudinally extending ridges and grooves alternately interleaved on an inner surface of said outer sleeve;wherein:
 - (i) said first plurality ridges are sized and shaped for slidable longitudinal movement along said second plurality grooves; and,
 - (ii) said second plurality ridges are sized and shaped for slidable longitudinal movement along said first plurality of grooves.
63. A screwdriver as defined in claim 62, said core having a rearward base portion.
64. A screwdriver as defined in claim 63, further comprising a third plurality of longitudinally extending ridges and grooves alternately interleaved on an outer surface of said base portion,
wherein:
 - (i) said third plurality ridges are sized and shaped for slidable longitudinal movement along said second plurality grooves; and,
 - (ii) said second plurality ridges are sized and shaped for slidable longitudinal movement along said third plurality grooves.
65. A screwdriver as defined in claim 56, wherein said shaft is non-rotatably retained on the forward end of said inner sleeve.

66. A screwdriver as defined in claim 56, wherein said shaft is rotatably retained on the forward end of said inner sleeve with a reversable one-way ratchet.
67. A screwdriver as defined in claim 50, wherein:
- (a) said core further comprises a forwardly projecting stem;
 - (b) said stem and said shaft are hexagonally apertured and are hexagonally aligned whenever said bit changing slot is positioned adjacent one of said bit storage cavities; and,
 - (c) said tool bit has a hexagonal cross section smaller than the hexagonal cross section of either one of said stem or said shaft apertures.
68. A screwdriver as defined in claim 55, wherein:
- (a) said core further comprises a forwardly projecting stem; and,
 - (b) said core aperture has a cross section smaller than a largest cross section of said tool bit.
69. A screwdriver as defined in claim 64, wherein said first, said second and said third plurality ridges and grooves are mutually aligned such that whenever said outer sleeve is telescopically slidably movable with respect to said inner sleeve said bit changing slot is aligned with one of said bit storage cavities.
70. A screwdriver as defined in claim 49, further comprising a forwardly projecting stem on said core, said stem having a forward rim for self-centering engagement within a rearward base on said shaft.
71. A screwdriver as defined in claim 49, further comprising a rearwardly protruding shank on said rearward end of said hand grip.
72. A screwdriver as defined in claim 71, wherein said push rod rearward end is recessed and fastened within said shank.

73. A screwdriver as defined in claim 72 wherein said bit changing arm is magnetic and wherein said releasable mounting is magnetic, and wherein said magnet means is a magnet mounted on said push rod.